DSCI 205 through Extended Education

Introduction to Business Statistics

## Lee McClain

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**Course Description**: Statistical methods used in business research, analysis and decision making; preparation and presentation of data, frequency distributions, measures of central tendency and dispersion, statistical inference, regression and correlation.

**Prerequisites:** Math 156.

**Textbooks:** Access to required homework management from MyLab Mastering and the textbook **Business Statistics**, Robert A. Donnelly, Jr., 2nd edition, Prentice Hall.

You have two options for purchasing MyLab and the textbook:

1. You can buy MyLab Mastering online with an e-book for $104.95. This is an all in one cost if you are willing to use the ebook. Use the set of instructions for enrolling in the MyLab in a separate file in Canvas.

You may purchase the loose-leaf copy of the textbook after you have enrolled in the class under the “Tools for Success” tab and following the instructions for a print upgrade ($55 to $65 dollars at the Pearson Store as prices may have changed)**.**

1. **The WWU bookstore value package is selling the loose-leaf copy of the textbook and the MyLab access code.**

**Objectives/Learning Outcomes:**

1. To learn the basics of analyzing, using and presenting business information in statistical form, including tabular and graphical summaries of data.
2. Measurements of central tendency and dispersion
3. Probability
4. Discrete distributions
5. Continuous distributions
6. Statistical inference
7. Confidence intervals
8. Hypothesis testing
9. Simple linear regression and correlation
10. To introduce students to the ethical and global issues of statistics.
11. To introduce students to the influence of political, social, legal and regulatory, environmental, and technological issues as related to an introductory study of personal statistics.
12. To introduce students to the impact of demographic diversity on organizations.

**Assessment of objectives:** Accomplishment of objectives/learning outcomes will be assessed on the examinations and submitted problem sets.

**Reasonable accommodation for persons with disabilities may be arranged through Disability Resources for Students (Old Main 110; 650-3083;** **drs@wwu.edu****;** [**http://www.wwu.edu/depts/drs/**](http://www.wwu.edu/depts/drs/)

***Evaluation:* We will evaluate the accomplishment of the objectives through:**

 **Exam #1 100**

 **Exam #2 100**

 **Final Exam 100**

 **My Lab Assignments 100**

 **Total Points: 400**

 **At or above**

**A 93%**

**A- 90%**

**B+ 87%**

**B 83%**

**B- 80%**

**C+ 77%**

**C 73%**

**C- 67%**

**D 63%**

**D- 60%**

 **Below**

**F 60%**

**Multi-chapter Exams: Multi-chapter exams will be in the same software as the homework. These are open book exams BUT you are ONLY ALLOWED two hours for each exam AND you must complete the exam on your own without assistance from others. You may use Excel and PHStat on the exams. However, you may find you need to use FORMULAS in DSCI 305 so you should learn to compute it and check it with PHStat. COMPLETE ALL ASSIGNMENTS BEFORE YOU TAKE THE EXAM, YOU ONLY GET ONE CHANCE ON THE EXAM!!!!!**

**MyLab Assignments: Assignments will be posted for each chapter in MyLab.**

**MyLab Course Tools: Under the “Course Tools” tab, go to “Document Sharing” to get all the PowerPoint slides I have used in lecture for this class. Also, there are helpful demonstrations and Excel functions you will want to use. Important NOTE!!!! MyLab will help you prepare for the computational part of an exam. However, the preparation for terminology questions (about half of the exam) comes primarily from reading and studying the textbook! If MyLab is all you use for exam preparation, you will probably not do as well as you would with complete preparation. COMPLETE ALL ASSIGNMENTS BEFORE YOU TAKE THE EXAM, YOU ONLY GET ONE CHANCE ON THE EXAM!!!!!**

**Academic Honesty: *Academic dishonesty is not tolerated at Western Washington University. Someone commits an act of academic dishonesty when he or she participates in representing something as the work of a student that is not in fact the work of that student. A Western student who is caught committing such an act at Western typically fails the course in which it occurred, and repeated such acts can lead to dismissal from the University. For a full description of the academic honesty policy and procedures at Western, see Appendix D in the catalog.***

**Flexibility Statement: This syllabus is subject to change. Changes, if any, will be announced in class and/or through blackboard. Students will be held responsible for all changes.**

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| --- | --- | --- | --- | --- |
| **Week** | **Date** | **Readings in Donnelly** | **Topic** |  |
| **1** |  | Chapter 1 | An Introduction to Business Statistics |   |
|   |  | Chapter 2 | Displaying Descriptive Statistics  |   |
|  |   |  |   |  |
| **2** |  |  |  |   |
|   |  | Chapter 3 | Calculating Descriptive Statistics |   |
|  |   |  |   |  |
| **3** |  |  |  |   |
|  |  | Chapter 4 | Introduction to ProbabilitiesComplete Chapter Assignments 1-4 **prior** to Exam #1 |   |
|  |   |  |   |  |
| **4**  |  | **Chapters 1-4** | Exam #1  |   |
|   |  | Chapter 5 | Discrete Probability Distributions |   |
|  |   |  |   |  |
| **5** |  |  |  |   |
|   |  | Chapter 6 | Continuous Probability Distributions |   |
|  |   |  |   |  |
| **6** |  | Chapter 7 | Sampling and Sampling Distribution |   |
|   |  |  |  |   |
|  |   |  |   |  |
| **7** |  |  | Complete Chapter Assignments 5-7 **prior** to Exam #2 |   |
|   |  | **Chapters 5-7** | EXAM #2  |   |
|  |   |  |   |  |
| **8**  |  |  |  |   |
|   |  | Chapter 8 | Confidence Intervals |   |
|  |  |  |  |  |
| **9** |  |  |  |   |
|   |  | Chapter 9 | Hypothesis Testing for a Single Population |   |
|  |   |  |   |  |
| **10** |  |  |  |  |
|   |  | Chapter 14 | Correlation and Simple Regression Analyses |  |

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| --- | --- | --- | --- | --- |
| **11**  |  |  | Complete Chapter Assignments 8, 9, and 14 **prior** to the Final Exam |  |
|   |  | **Chapters 8, 9, 14** | FINAL EXAM  |  |

**The breakdown by weeks is only a GUIDELINE for pacing. You may do it faster or slower as long as you complete within the registration period for this Extended Education course (currently six months).**